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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/623,784

07/21/2003

Richard Foote

RSTN-088

6093

30139 7590 10/25/2007
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EXAMINER

CHO, HONG SOL

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

10/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/623,784	Applicant(s) FOOTE ET AL.	
	Examiner Hong Cho	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22 and 32 is/are allowed.
- 6) ☒ Claim(s) 23-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/2007 has been entered. Claims 1-32 are pending in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hama (US 20040202171) in view of Ishizaki et al (US 7099912), hereinafter referred to as Ishizaki.

Re claim 23, Hama discloses establishing virtual private network (*establishing a customer-specific virtual private local area network (VPL) through a multiprotocol label switched (MPLS) domain* in claims 23 and 32, paragraph [0002], lines 18-21). Hama

discloses a provider edge device (PE) (figure 6, element 213) receiving traffic from another PE (figure 6, element 212) via a MPLS network (*receiving traffic from a customer at a provider edge device (PE), wherein said PE connects to other PEs via a tunnel-capable network*). Hama discloses a PE distributing traffic to either Internet (*first service, non-VPL service in claims 23 and 32*) or within corporate enterprise (*default service, VPL service in claim 23, remaining traffic in claim 32*) based on virtual local area network (VLAN) identifiers (IDs) (*associating traffic with either the first service or with a default service in response to the classification, traffic; forwarding non-VPL traffic outside of said customer-specific VPL; and forwarding the remaining traffic within said customer-specific VPL in claim 32, paragraph [0093]*), but fails to disclose explicitly identifying a set of virtual local area network (VLAN) identifiers (IDs) for use with a first service and associating traffic based on explicitly identified set of VLAN IDs. Ishizaki discloses allowing VID-A and VID-B to access Internet (*explicitly identifying a set of virtual local area network (VLAN) identifiers (IDs) for use with a first service, column 8, lines 26-36*) and checking VLAN ID to determine how to distribute the traffic (*associating traffic with either the first service or with a default service in response to the classification, column 8, lines 28-36*). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the PE of Hama to implement the function of associating traffic with either the first service or with a default service in response to the classification, as suggested by Ishizaki (column 8, lines 32-33), so that Internet access would be managed by VLAN ID.

Re claim 24, Hama discloses using IEEE 802.1q VLAN IDs for constructing VPN, but fails to disclose identifying IEEE 802.1q VLAN for use with a first service (non-VPL traffic in claim 24). Ishizaki discloses allowing VID-A and VID-B to access Internet (*explicitly identifying a set of virtual local area network (VLAN) identifiers (IDs) for use with a first service*, figure 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the PE of Hama to implement the function of associating traffic with either the first service or with a default service in response to the classification, as suggested by Ishizaki (column 8, lines 32-33), so that Internet access would be managed by VLAN ID.

Re claim 25, Hama and Ishizaki disclose all of the limitations of the base claim, but fail to disclose determining whether the traffic is non-VPL traffic before determining whether the traffic is VPL traffic. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Hama and Ishizaki to process non-VPL traffic before VPL traffic so that non-VPL traffic would be processed with high priority.

Re claims 26 and 27, Hama discloses all of the limitations of the base claim, but fails to disclose identifying a set of VLAN IDs for use with a first service and identifying traffic as VPL traffic if VLAN ID is not identified with a set of VLAN IDs. Ishizaki discloses allowing VID-A and VID-B to access Internet (*identifying a set of VLAN IDs for use with a first service*, figure 5) and associating VID-C with VPL traffic (*associating traffic with VPL traffic*, column 8, lines 28-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the PE of

Hama to implement the function of associating traffic with either the first service or with a default service in response to the classification, as suggested by Ishizaki (column 8, lines 32-33), so that Internet access would be managed by VLAN ID.

Re claims 28 and 29, Hama discloses finding VPN identifier corresponding to the VID contained in the tag (*configuring L2 FEC that maps the non-VPL traffic to a label switching path (LSP) that does not support the customer-specific VPL and maps the VPL traffic to a LSP that supports the customer-specific VPL service*, paragraph [0015], lines 10-16).

Re claim 30, Hama discloses encapsulating a packet with a VPN label (*a tunnel label*) and a VLAN ID (*a virtual circuit label*) (paragraph [0093]).

Re claim 31, Hama discloses VLAN IDs having per-port significance (figure 7).

Allowable Subject Matter

4. Claim 1-22 and 32 are allowable.

The following is an examiner's statement for reasons for allowance.

5. Claims 1, 14 and 32 are allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or fairly suggest explicitly identifying a set of virtual local area network (VLAN) identifiers (IDs) for use with a first service, receiving traffic from a customer at a provider edge device (PE), wherein said PE connects to other PEs via a tunnel-capable network, classifying said traffic, associating said traffic with said first service in response to said classification if said traffic has a VLAN ID from the explicitly identified set of VLAN IDs, associating said traffic with a

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default service in response to said classification if said traffic does not have a VLAN ID from the explicitly identified set of VLAN IDs, and redefining the explicitly identified set of VLAN IDs without having to redefine VLAN IDs that result in traffic being associated with the default service.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc
Hong Cho
Patent Examiner
10/23/07